

BIOSOLIDS EXPERT PANEL

Meeting Minutes

Date: September 18, 2007

Location: House Room C, General Assembly Building, Richmond, VA

Co-Chairs:

- **L. Preston Bryant, Jr.**, Secretary of Natural Resources
- **Marilyn B. Tavenner**, Secretary of Health and Human Resources

Panel Members Present:

- **Dr. Ralph O. Allen**, University of Virginia School of Medicine
- **Russ Baxter**, Virginia Department of Conservation and Recreation
- **Dr. Robert Call**, Medical practitioner
- **Jerre Creighton**, Virginia Department of Forestry
- **Barry Dunkley**, City of Danville
- **Dr. Greg Evanylo**, Virginia Tech Department of Crop and Soil Environmental Sciences
- **Dr. Susan Fischer-Davis**, Virginia Department of Health
- **Dr. Tom Fox**, Virginia Tech Department of Forestry
- **James Golden**, Virginia Department of Environmental Quality
- **Dr. Robert Hale**, Virginia Institute of Marine Science
- **Scott P. Johnson**, Virginia Department of Agriculture and Consumer Services
- **Dr. Howard Kator**, Virginia Institute of Marine Science
- **Dr. Mark Levine**, Virginia Department of Health
- **Karen Pallansch**, Alexandria Sanitation Authority
- **Christopher Peot**, Blue Plains
- **Dr. Alan B. Rubin**, Consultant (Principal, Envirostrategies, LLC)
- **Henry Staudinger**, Citizen representative
- **Dr. Jonathan Sleeman**, Virginia Department of Game and Inland Fisheries
- **Dr. R. Leonard Vance**, Virginia Commonwealth University School of Medicine

Four members of the panel were unavailable to attend:

- **Dr. Rima B. Franklin**, Virginia Commonwealth University Center for Environmental Studies
- **Dr. W. Lee Daniels**, Virginia Tech Department of Crop and Soil Environmental Sciences
- **Dr. Nancy Love**, Virginia Tech Department of Civil and Environmental Engineering
- **Dr. John T. Novak**, Virginia Tech Department of Civil and Environmental Engineering

Supporting staff present:

- **Jeff Corbin**, Office of the Secretary of Natural Resources
- **Robert Hicks**, Virginia Department of Health
- **Gail Jaspen**, Office of the Secretary of Health and Human Resources
- **Angela Neilan**, Virginia Department of Environmental Quality
- **Valerie Rourke**, Virginia Department of Environmental Quality
- **Neil Zahradka**, Virginia Department of Environmental Quality

Introduction

Secretary of Natural Resources L. Preston Bryant, Jr. brought the meeting to order at 1:00 p.m. He briefly discussed House Joint Resolution (HJR) No. 694 related to the development and purpose of the Biosolids Expert Panel (Panel). He then introduced Secretary of Health and Human Resources Marilyn Tavenner.

Secretary Bryant noted that the meeting will be limited to three hours and the panel will need to move quickly within this period. He noted that there is great interest in biosolids from both a health and environmental perspective. The Panel is a 'body politic' created by legislation. Therefore, it will keep minutes and will provide a period for public comment. Minutes of the Panel meetings, reports and links will be provided on a webpage created specifically for the Panel on the DEQ internet website. All information compiled and produced by the Panel is subject to FOIA and is, therefore, available to the public. Public comments on the Panel's meetings must be submitted within 10 days following the meetings. Public comments will also be received at the Panel's meetings and should be related to items on the meeting agenda for the Panel.

Secretary Tavenner noted that House Joint Resolution No. 694 is about perceived, as well as real, health issues related to the use biosolids.

Secretary Bryant stated the two Secretaries tried to assemble a broad range of stakeholders for the Panel that are technical experts in a variety of disciplines, including physicians, medical educators, foresters, agronomists, environmental scientists, ecologists, veterinarians, attorneys, etc. The Panel will be supported by both DEQ and VDH staff. Additional experts may be invited as necessary and at the request of the Panel.

Panel Member Introductions

At the request of Secretary Bryant, all Panel members that were present introduced themselves and provided some information regarding their occupation, their employer and their experience related to biosolids.

Panel Logistics

Secretary Bryant referred to the meeting agenda to discuss overview and logistics. He noted the following:

Expectations of the Panel are governed by HJR 694. No money is allocated by legislation to the Panel. There already exists much scientific peer-reviewed literature and research, thus the panel will not be expected to "reinvent the wheel". The Panel need only focus on that which is most applicable to Virginia. According to the executive summary of a report prepared by the National Academy of Science regarding biosolids land application and EPA's oversight nationally, items that are needed from EPA include more review and investigation of health issues related to biosolids land application, new risk assessments, a new national survey of biosolids, more resources at EPA devoted to compliance and oversight, and more involvement.

The Panel is not being asked to rewrite biosolids regulations, although this may be a recommendation of the Panel. Also, the Panel can not delve into every biosolids issue except within the bounds of HJR No. 694. An interim and final report must be submitted from the Panel to legislators by November 30, 2007 and November 30, 2008, respectively.

The Panel may be split into two groups – one group focusing on health issues and the other focusing on environmental issues. A third group may be developed to focus on technologies, or technologies may be made a subgroup of both the health and environmental issues groups. Work groups should meet in October and have their portion of the interim report prepared by mid November. Work groups will not have a chair, but will have facilitators provided instead.

If possible, the Panel should seek input from EPA and the National Academy of Sciences.

Public Comment Period

Secretary Bryant referred to the meeting agenda to discuss the public comment portion of the meeting. Rules for submitting verbal comments were reviewed and written comments may be submitted in addition to verbal comments at today's meeting.

Secretary Bryant introduced Angela Neilan from DEQ to begin the public comment period.

During public comments, Secretary Bryant requested that persons submitting comments refrain from making comments about members of the Panel by name and to remain constructive. He defended the composition of the Panel stating that it consisted of professionals with strong and diverse expertise who were devoting their own time and effort to the Panel without compensation.

The following persons provided public comment:

- 1) Rhonda Bowen – Virginia Association of Municipal Wastewater Agencies, Inc. and Hampton Roads Sanitation District
- 2) Dr. Lynton S. Land – Northumberland Association for Progressive Stewardship
- 3) Rev. Gayl Fowler –SAIF Water Wells, Inc.
- 4) Michael S. Harwood – Northumberland Association for Progressive Stewardship
- 5) C.W. Williams – Biosolids Information Group
- 6) Mary Graf – Campbell County resident
- 7) Janice Buchholz – Prince Edward County resident
- 8) Hunter Richardson – Synagro
- 9) Denise Thompson – Virginia Municipal League
- 10) Larry Land – Virginia Association of Counties
- 11) Thomas H. Tullidge – Tulloch Farm

All public comments made at the meeting were digitally recorded.

Virginia Department of Health Presentation

Secretary Bryant referred to the meeting agenda and introduced Mr. Bob Hicks from the Virginia Department of Health..

Mr. Hicks presented an overview of the current biosolids regulatory program in Virginia.

Question and Answer Period for Mr. Hicks:

Question from Robert Hale: How many Health Department employees are qualified to review health impacts of biosolids?

Response from Mr. Hicks: The Health Districts of VDH have been involved in public meetings for biosolids land application permits, and the permits also have setbacks to protect human health. For persons with immunological difficulties, VDH has the ability to increase setbacks from application sites. Approximately 4 years ago, VDH also established an epidemiology work group to look at health issues related to biosolids land application.

Question from Alan Rubin: Does VDH have authority to study aesthetic issues related to biosolids land application?

Response from Mr. Hicks: For odor sensitive persons, VDH can adjust buffers if a true health affect exists.

Question from Leonard Vance: What was the basis for the General Assembly to transfer the biosolids land application program from VDH to DEQ?

Response from Mr. Hicks: Due to limited resources, the VDH could not always have oversight of proper application at correct rates with regard to nutrients.

Question from Ralph Allen: Are aerosols addressed in the Biosolids Use Regulations?

Response from Mr. Hicks: Under certain wind velocities, VDH can restrict biosolids land application?

Question from Robert Call: Is there enforcement of monitoring wind velocity?

Response from Mr. Hicks: There were some resources available to do this by VDH staff and with help from local monitors.

James Golden offered additional information regarding the transfer of the biosolids program from VDH to DEQ, noting it will occur officially on January 1, 2008. With this transfer, DEQ will receive approximately 20 staff positions, approximately 13 of which will be in the field to monitor and inspect biosolids land application sites for compliance. The agency anticipates reopening the regulations transferred to the DEQ from VDH after January 1, 2008 for further revision.

Secretary Tavenner added that the VDH will continue to play a role in biosolids land application on health related issues.

Expert Panel Discussion (facilitated)

Secretary Bryant referred to the meeting agenda and requested that Angela Neilan now facilitate the Panel discussion.

Angela Neilan provided handouts to the Panel and then referred to the handouts. Tasks required of the Panel are described in HJR 694. The Panel was asked to look at the handout on "Study Topics". This handout clarifies the Panel's charge, questions to answer and additional duties. The questions to be addressed are broad. Ms. Neilan asked how the Panel wants to accomplish these tasks.

Alan Rubin responded that the number of tasks for the Panel is too great. He recommended that the Panel will need to prioritize, and offered that aerosol/vapor is the most likely route of

exposure to humans. He opined that the Panel should focus more on human health issues and secondarily on ecological impacts.

Robert Hale responded that wildlife is an indicator like the canary in the coal mine. He recommended the panel needs to keep the perspective broader.

Alan Rubin noted that he did not recommend the panel ignore any issues, only that prioritization is still needed based on the number of tasks.

Leonard Vance stated that there should be two separate work groups – one for human health and the other for environment.

Greg Evanylo stated the Panel needs to address what the General Assembly wanted and needs to prioritize. There should be two work groups and some members of the Panel should be in both groups for cross-over.

Alan Rubin stated the Panel needs ground rules. Consensus is desirable but not always achievable. He questioned whether the work group or Panel reports be by majority or consensus?

Secretary Bryant stated that reports should note differences and where there are differences, a declarative approach might be best.

Secretary Tavenner stated that the Panel needs to compare Virginia to other states regarding biosolids problems and issues.

Chris Peot stated that each work group should perform literature searches and groups should then share literature and information.

Robert Hale stated there should be a third group to address technology issues.

Robert Call stated technology should be discussed in both work groups (human health and environmental).

Greg Evanylo asked should technology be a later step after groups identify problems? The groups could then ask if the problems are related to technology and is there technology available to correct the problem.

Alan Rubin agreed with Greg Evanylo. He also stated community involvement is needed, and that the question of “what are the impacts of biosolids on the community?” should be answered.

Mark Levine stated that, related to human health, the first question to ask is if an association can be demonstrated between biosolids land application and health symptoms.

Howard Kator stated an inventory of what is in biosolids is needed. He stated that what is going into sewage now is different than what went into it years ago.

Jonathan Sleeman asked will there be guest speakers with expertise on specific topics?

Secretary Bryant answered that yes, guest speakers will be invited at the request or suggestion of the work groups or Panel.

Tom Fox asked if the Panel can get information on whether existing rules or regulations were followed? Is there a way to determine the relationship between the cause of problems and enforcement by VDH?

Alan Rubin stated that the impact of animal waste should be included in the study to provide objectivity.

Greg Evanylo stated the composition of Biosolids are not all that different than they were 20 years ago. Greg asked Chris Peot about the results of the WERF survey to identify people who allegedly became ill from biosolids.

Chris Peot replied that the study is ongoing and the study group is trying to reach consensus. They are also trying to develop a survey to investigate incidents of health impacts.

Robert Hale disagreed that the composition of biosolids are well known and understood.

Chris Peot referred to item 2 under “Additional Duties” of “Study Topics”, and asked how the Panel is expected to accomplish this? This would take money and much more time than what is available.

Secretary Bryant responded that there may be things the Panel will need to report as not possible to address.

Susan Fischer-Davis recommended the Panel should at least point out other groups that may address things that this Panel could not address.

Robert Call asked if there are other states organizing panels or groups that are similar to this panel?

Alan Rubin responded affirmatively, stating Pennsylvania, Florida, Texas and California, but not that many in the corn belt states.

Greg Evanylo noted that New York also had a round table similar to this Panel that was larger and did not reach consensus.

Angela Neilan reminded the group that this is a large project and may not be accomplished in 15 months.

Robert Call stated that the Panel’s focus should be to get facts and not speculate. He recommended to get facts and agree on those facts.

Tom Fox stated there should be some facts and issues on which there will be consensus. He stated there will also be areas of disagreement that might be recommended for further study by the Panel.

Secretary Bryant recommended the Panel try to determine what constituents of biosolids need to be tested.

Robert Hale stated we will never be able to determine all the constituents of biosolids and, therefore, we’ll always have uncertainty and possible risk. He suggested the Panel should focus on human health without knowing all the constituents in biosolids.

Alan Rubin stated that the fact that something is found in biosolids does not always represent risk to human health or is a source of contamination in the environment.

Robert Hale stated that fish in Virginia have some of the highest levels of flame retardants in their tissue. Earth worms in fields receiving biosolids have also been found to have elevated levels of flame retardants.

Scott Johnson stated the Panel should try to accumulate as much information as possible. Fifteen months is not enough time to make recommendations.

Alan Rubin disagreed and stated that recommendations should be made by the Panel to affect future policy.

Environmental and Health Workgroup Divisions

Angela Neilan asked the Panel if they were now ready to try and form two groups for Environmental and Health issues.

The Panel agreed and each member indicated which work group they wished to be assigned to, with Panel members indicating they would like to be kept apprised of the activities of the other group. Some members indicated they would like to be members of both workgroups.

| Work Group Membership Preference | |
|---|--------------------------|
| Environmental Work Group | Health Work Group |
| Barry Dunkley | Robert Call |
| Ralph Allen | Mark Levine |
| Jonathan Sleeman | Leonard Vance |
| Jerre Creighton | Greg Evanylo |
| Tom Fox | Howard Kator |
| Greg Evanylo | Chris Peot |
| Howard Kator | Alan Rubin |
| Chris Peot | James Golden |
| Alan Rubin | Henry Staudinger |
| Scott Johnson | Robert Hale |
| Henry Staudinger | Susan Fischer-Davis |
| Karen Pallansch | Scott P. Johnson |
| Russ Baxter | |
| Robert Hale | |

Public Notice of Meetings

Angel Neilan noted that all meetings of the work groups must be public noticed.

Robert Call asked who will provide the public notice.

Secretary Bryant answered that the office of the Secretary of Natural Resources will provide the notice.

Tom Fox asked if members of a work group or the Panel communicate with each other without public involvement.

Angela Neilan noted that all meetings of Panel or work group members must be public noticed. Angela Neilan read the outline rules provided by Cindy Berndt, DEQ Regulatory Coordinator, which must be followed by the Panel or work groups regarding their meetings. Those rules are as follows:

- 1) All meetings to be public – includes the full panel and the work groups
- 2) All meetings (full panel and work groups) to be announced at least 3 working days in advance
- 3) All meetings (full panel and work groups) to have minutes of meeting – draft provided to panel or work group within 10 working days and final within 3 working days of approval

Minutes must include: date, time and place; members of the panel/group present and absent; summary of discussion on matters proposed, deliberated or decided, and a record of any votes taken.

- 4) Meetings can be held by teleconference or videoconference – Same rules apply for notice of meeting and minutes PLUS a quorum of the group must be in a single location; all other locations must be open to the public; if there are technical difficulties, the meeting must stop until the difficulties are resolved.

Neil Zahradka, Manager of the DEQ Office of Land Application Programs, introduced himself to the panel and stated that meetings of the Panel will be posted on the DEQ internet website and will have links to the Regulatory Town Hall website. The Town Hall is the official site for notice of public meetings.

Scott Johnson stated that a meeting of more than two persons is considered a public meeting.

Ralph Allen stated that information from literature searches by the Panel or work groups should be posted on the DEQ internet website.

Next Meeting Date

Secretary Bryant asked Jeff Corbin, Assistant Secretary of Natural Resources, about the protocol for establishing the next meeting date of the Panel.

Jeff Corbin indicated he will set up meeting dates of the Panel via e-mail.

Greg Evanylo asked for those members of the Panel that could not make the meeting today, will they be contacted for work group assignment, etc.?

Secretary Bryant responded affirmatively, adding that only four members of the Panel could not make the meeting today.

Angela Neilan stated that the next meeting will be of the work groups (not the full Panel) sometime in October.

Secretary Bryant adjourned the meeting at 3:38 p.m.